

EXPLORING THE IMPACT OF BIO-PSYCHO-SEXUAL DETERMINANTS IN IRRITABLE BOWEL SYNDROME

INTRODUCTION

- Irritable bowel syndrome (IBS) is a group of symptoms that occur together, including repeated pain in abdomen and changes in bowel movements, which may be diarrhea, constipation, or both. This illness affects the bowel habits without obvious structural abnormalities seen on endoscopy or X-ray.
- It can be diagnosed clinically, based on exclusion of any organic disease. Lifestyle factors such as smoking, alcoholism and physical inactivity have been associated with IBS, Stress, Anxiety and certain foods were the triggering the IBS
- Better understanding of Irritable bowel syndrome illness requires a shift from concepts traditionally taught in Western medical schools to that of multicausality, where biologic and psychologic factors interact to determine the disease and its experience or illness

NEED OF THE STUDY

In current medical practice irritable bowel syndrome is a prevailing functional bowel disorder among women. Though there are many pathophysiological factors directly or indirectly associated with irritable bowel syndrome the perspective of medical diagnosis and management is still approaching towards gastrointestinal and physical activity disorder. The contraption of this study recommends multidisciplinary approach similarly in treating underlying factors such as bio psychosexual determinants which will significantly improve the quality of life.

PATHOPHYSIOLOGY

Though there are various etiological factors for IBS, Gut – Brain Axis, Serotonin, SERT polymorphism and Hypothalamo-Pituitary-Adrenal (HPA) axis plays vital role in triggering and perpetuating IBS

Brain-gut axis” can be conceptualized as the bidirectional connection system between the GI tract (with its enteric nervous system) and the brain Thus, when gut function is disturbed, the cause of this disturbance can be found in the GI tract itself or in the modulatory input from the central nervous system via the brain-gut axis

METHOD

It is a non-experimental, correlation study conducted in the year 2022. The participants of age group 25-35 diagnosed with IBS according to ROME III Criteria were recruited

Physical activity, Sexual Function, Social Behaviour and stress were analyzed using questionnaires.

Hormone level Estrogen, progesterone and Cortisol were analyzed. Following the aseptic protocol, approximately 5 ml of venous blood sample was drawn from the participants in plain vacutainer .After centrifugation, the serum sample were separated and stored in deep freezer at -20 degree C for further analysis. Serum samples were analyzed using Competitive ELISA washer and reader method.

RESEARCH QUESTION

To Find out correlation of bio psychosexual triage among irritable bowel syndrome patients



NOVELTY OF THE STUDY

A crucial element of any successful intervention is multidisciplinary approach as proven in many cases which is very true and when we are approaching the irritable bowel syndrome as a functional gastrointestinal problem we should also look for the associated factors and plan the treatment

COMMUNITY NEED

Most commonly irritable bowel syndrome among women is predominantly treated as gastrointestinal disorder, The consequences of irritable bowel syndrome significantly reduces women's quality of life, limits their productivity inputs into society, at some extent women's go unnoticed. This study looks forward in treating the associated factors which will significantly create a eco physical & sexual life style among women. So that women can play a exceptional role in taking care of family & creating a harmonious society.

RESULT

Factors	Age	PA	Stress	FSFI	S.Progesterone	S.Cortical	S. Estrogen	Behaviour
Age	1	.233	-0.123	-0.318	0.337	-0.042	0.095	-0.060
PA	0.223	1	-	-0.008	-0.164	0.175	0.149	0.160
Stress	-0.123	-0.134	1	0.319	-0.227	0.238	0.375	0.521
FSFI	-0.318	-0.008	0.319	1	-0.630	-0.022	0.080	0.069
S.Progesterone	0.337	-0.164	-0.227	-0.630	1	-0.143	-0.168	-0.203
S.Cortical	-0.042	0.175	0.238	-0.022	-0.143	1	-0.032	0.217
S.Estrogen	0.095	0.149	0.357	0.080	-0.168	-0.032	1	0.227
Behaviour	-0.060	0.160	0.521	0.069	-0.230	0.217	0.227	1

DISCUSSION

- Physical activity of the participants positively correlates with age, serum estrogen levels, serum Cortisol level and social behavior. which also negatively correlates with stress, FSFI, serum Progesterone
- Stress levels among the women correlates positively with Serum estrogen levels, FSFI, Serum Cortisol levels and social behavior; and negatively correlates with age, physical activity, Serum Progesterone
- Sexual function (FSFI) in women positively correlates with Serum estrogen levels, stress and social behavior and was negatively correlated with age, Physical activity, Serum Progesterone and Serum Cortisol levels.
- Serum Progesterone levels of the participant negatively correlates with all the influencing factors of IBS
- Serum estrogen levels positively correlates with the age of the participants, their physical activity level, perceived stress and social behavior. It negatively correlates with Serum Progesterone and Serum Cortisol levels.
- Serum Cortisol levels of the participants positively correlates with physical activity, stress and social behavior. While it negatively correlates with age, FSFI, serum progesterone and serum estrogen
- Social behavior of the participants positively correlates with the physical activity, stress, FSFI, Serum Cortisol and serum estrogen. It was negatively correlated with age and serum progesterone levels.

CONCLUSION

This study conclude that there was a Highly positive correlation between social behavior and perceived stress .positive correlation among Serum cortisol and serum estrogen and FSFI Scores. Further more we have observed negative correlation between age, physical activity and Serum progesterone. This study also concludes that that perceived stress and fluctuation of sex hormones level aggravates the IBS symptoms



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Thank You